

===== WPI =====

TI - Stable electrochemical sensor - has working, counter and reference electrodes on plane of insulating substrate and also solid electrolyte layer covering electrodes

AB - J02087059 Electrochemical sensor has a working electrode, a counter electrode and a reference electrode on a same plane of an insulating substrate, and a solid electrolyte layer provided to cover three electrodes. and the substrate between them; where a water reservation tank (to supply water to the solid electrolyte layer) and the solid electrolyte layer are connected with a water supplying means and a restricted ventilation part (allowing the ventilation between the solid electrolyte layer and the external field) is so provided that its opening faces downward.

- USE/ADVANTAGE - Here, by keeping the water content of the solid electrolyte layer at a constant level by supplying water to the solid electrolyte layer from the water reservation tank, the sensivity of the sensor is stabilised and by controlling the evapn. of the water from the solid electrolyte layer to external field by the restricted ventilation part, the water content of the solid electrolyte is stabilised for longer period and the sensor's life is extended. Since the restricted ventilation part has the opening downwards, it is prevented from being blinded with oil mist etc. and the above mentioned effects are enhanced. (6pp Dwg.No.1/4)

PN - JP2087059 A 19900327 DW199018 000pp

PR - JP19880239491 19880924

PA - (MATW) MATSUSHITA ELECTRIC WORKS LTD

MC - J04-C04 L03-D04

- S03-E03

DC - J04 L03 S03

IC - G01N27/41

AN - 1990-137183 [18]

===== PAJ =====

TI - ELECTROCHEMICAL SENSOR

AB - PURPOSE:To prevent the clogging of a shielding body and to prolong further the lifetime of a sensor by providing a restricted vent part so that it opens downward.

- CONSTITUTION:A working electrode 20, an opposite electrode 30 and a reference electrode 40 are provided on the same surface of an insulative substrate 10, and a solid-electrolyte layer 50 is so provided as to cover the electrodes 20 to 40 and spaces between them. A water tank 60 supplying water to the electrolyte layer 50 is joined to the electrolyte layer 50 by a water supplying means, while a restricted vent part securing an airflow between the electrolyte layer 50 and the outside in a restricted manner is provided. In a sensor thus constructed, a vent 81 is so provided in the base of a shielding body 80 as to open downward and to serve as the restricted vent part securing the airflow between the electrolyte layer 50 and the outside in a restricted manner. Thereby evaporation of water to the outside from the electrolyte layer 50 is controlled to make excellent the action of maintaining the water retention of the electrolyte layer 50 by the water tank 60, while a quantity of airflow from outside being necessary for detection of gas can be secured. Besides, it is made possible to prevent the deposition of oil mist or dust on the restricted vent part and to prolong the lifetime of the sensor.

PN - JP2087059 A 19900327

PD - 1990-03-27

ABD - 19900620

ABV - 014286

AP - JP19880239491 19880924

GR - P1064

PA - MATSUSHITA ELECTRIC WORKS LTD

IN - KUSANAGI SHIGEKAZU

I - G01N27/416

